We claim,

1. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols both with even number of carbon atoms, in which the even carbon number is selected from 2-50, pharmaceutical compositions and applications thereof wherein the said pharmaceutical compositions comprises at least one pharmaceutically active ingredient and the said biodegradable aliphatic polyester derived from fatty diacids and fatty diols both with even number of carbon atoms such as 2-50;
   wherein the said pharmaceutical compositions are in the form of different drug delivery systems such as drug loaded microparticles, nanoparticles, molded implants, coated granules, injectable sustained release particles, stents, films, matrix tablet, coated tablets, dry syrup, mouth dissolving tablets, microparticles dispersed in gels, taste masked formulation, inserts (ophthalmic), fibers, ligatures and sutures.
2. Novel biodegradable non-toxic aliphatic polyesters derived from the fatty diacids and fatty diols as claimed in claim 1 wherein the said fatty diacids with one carbon atom, particularly, Carbon di- oxide as carbonic acid, H_2CO_3, may also be used to prepare the said biodegradable aliphatic polyester.
3. Novel biodegradable non-toxic aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claim 1 to 2 wherein the said biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols in the molar ratio of 1:1 or could vary from 0.97:1 to 1:1.03 depending on the end group required.
4. Novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 3 wherein molecular weight of the said biodegradable aliphatic polyesters is in the range of 3,000 to 30,000.
5. Novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 4 wherein LD_{50} of the said biodegradable aliphatic polyesters is more than 2000 mg/Kg of body weight of mice.

6. Novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 5 wherein the said biodegradable aliphatic polyesters has thermal stability and excellent mechanical properties.
7. Novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 6 wherein the said pharmaceutically active ingredient is selected from anti-hypertensives, cardiovascular agents, analgesics, steroids, physiologically active peptides and / or proteins, anti-cancer agents, antibiotics, fibrinolytics, anti-inflammatory agents, expectorants, muscle relaxants, epilepsy remedies, anti-ulcerative agents, anti-hyperchondriac agents, anti-allergic agents, diuretics diabetes curatives, hyperlipidemic remedies, anticoagulants, hemolytic agents, anti tubercular agents, hormones, anesthetic antagonists, osteoclastic suppressants, osteogenic promotives, angiogenesis suppressors, mydriatics, myotics, glaucoma therapy and or mixtures thereof.
8. The drug delivery system of novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 7 wherein the said drug delivery system is drug-loaded micro / nano particles.
9. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 7, wherein the said drug delivery systems are molded implants containing drug.
10. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 7 wherein the said drug delivery systems are coated granules, prepared by coating the granules with 1-5% solution of the said biodegradable aliphatic polyester in a suitable solvent.
11. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms as claimed in claims 1 to 7 wherein the said drug delivery systems are injectable

sustained release microparticles suitable for sub-cutaneous, intra-muscular or periodontal administration for sustained action for the required period.

12. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms in the form of stents as claimed in claims 1 to 7 wherein the said stent form is prepared by molding the said biodegradable aliphatic polyester into stents after being ablated with laser.
13. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms in the form of microparticles dispersed in gel as claimed in claims 1 to 7 wherein the said drug delivery system in gel form is prepared by incorporating the micro particles in a gel suitable for use in the treatment of periodontitis.
14. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms in the form of films as claimed in claims 1 to 7 wherein the said drug delivery system in the form of film is self supporting drug loaded films.
15. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms, pharmaceutical compositions and applications thereof as claimed in claims 1 to 8, 11 and 13 wherein the stabilizing agents are selected from polyvinyl alcohol, polyvinyl pyrrolidone, alginate, gelatin, methyl cellulose, polyoxyethylene derivatives of sorbitan fatty esters and polyoxyethylene fatty ethers.
16. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms, pharmaceutical compositions and applications thereof as claimed in claim 1 to 15 wherein the drug to polymer ratio is selected from 95:5 to 1:99.
17. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms, pharmaceutical compositions and applications thereof as claimed in claim 1 to 8, 11 and 13 wherein particle size of microparticles is in the range of 10nm to 1000 microns depending on the type and concentration of stabilizer and drug to polymer ratio used in the formulation.

18. The drug delivery system of novel biodegradable aliphatic polyesters derived from the fatty diacids and fatty diols with even number of carbon atoms in the form of drug loaded microparticles, nanoparticles, molded implants, coated granules, injectable sustained release particles, stents, films, matrix tablet, coated tablets, dry syrup, mouth dissolving tablets, microparticles dispersed in gels, inserts (ophthalmic), fibers, ligatures and sutures as claimed in claims 1 to 17 wherein the said drug delivery systems are with or without the addition of lipase to modify the drug release.
19. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms, pharmaceutical compositions and applications thereof as claimed in claims 1 to 18 wherein the said pharmaceutical compositions could be administered by either oral, ophthalmic, parenteral, mucosal or transdermal route.
20. Novel biodegradable aliphatic polyesters derived from fatty diacids and fatty diols with even number of carbon atoms, pharmaceutical compositions and applications thereof as substantially described herein with reference to foregoing examples 1 to 18.